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MULTIPLE USE
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THE CONCEPT OF MULTIPLE USE

BY

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MULTIPLE USE OF FOREST LAND

The Concept of Multiple Use

By Chas. A. Connaughton

The term "multiple use" as applied to land management is often misunderstood. Yet, in spite of uncertainities in meaning, is widely used. As a common term, therefore, it needs explanatory definition.

One of the main reasons that "multiple use" has vague connotations is that it describes a concept of land use rather than a system or method. As a concept it is not subject to precise and universal meaning when applied area by area but has broad, overall application and significance.

A forest may have major value for sawlog production with intermingled values for recreation, water yield, grazing by domestic livestock and wildlife, and mining. Another forest may have little timber production but have vital recreation and watershed values. Actually there are innumerable combinations of use varying with the area and the combination of resources formed thereon.

As a general rule, however, multiple use is simply a concept of management which involves a combination of uses or services of the land in such a way that full utilization is realized consistent with managerial objectives. This presupposes that the uses and services will be combined in a manner so that they are complementary, insofar as attainable.

TIMBER

The forest has multiple values and services. When these are used so that the contribution from a combination of uses is greater than from any single one, then multiple use of the area is obtained.

When this is not attainable minor uses must be adjusted to exclude conflict with the major or dominant use or uses.

Multiple Use Applies to Large Areas

The multiple use concept is conceived to apply to large areas, such as watershed units. As such, it is a misconception if it is thought to specifically apply acre by acre. If, in the process of application, multiple use of individual acres is obtained - and this does happen frequently - there is no conflict with the definition; but such pinpoint application is purely incidental and is not intended or necessarily desired. The dedication of individual acres to single uses within a management unit is a perfectly logical procedure consistent with the multiple use concept.

Objectives Must be Defined

In applying multiple use to an appropriate area the first determination involves a definition of land management objectives. These objectives are those of the land manager or owner and may be determined by a number of factors. On private land it probably means that the objectives are influenced most strongly and properly by profit considerations. On the public lands it may mean full use which is designed to satisfy the overall public needs which may or may not be tangible as measured by income. However, irrespective of the ownership, the objective of management must be clearly understood prior to any effort to apply the multiple use concept.

CAMPGROUND

Harmonizing recreation use and timber production frequently requires some adjustment in both uses to obtain the maximum contribution from a combination of them. Skillfull land management methods are needed to obtain multiple use where potential conflicts are involved.

Once objectives of land management are defined the techniques of using the individual resources in a manner complementary to each other come in to play. If all values and services can be used to a maximum without conflicts the ultimate is obtained. However, such full use isn't usually attainable, particularly under intensive management. In short, a harmonious combination of uses to arrive at the maximum overall service from the land usually requires some concessions in individual uses. In a managed forest the maximum production of wood might be adjusted downward to benefit wildlife, water yield, or recreation if the defined objectives so dictate.

It is significant that the demands of an expanding population with corresponding pressures on all land uses make it more important to secure multiple use. When uses are competitive, as is to be expected under pressure, they just don't fit together easily. Certainly, under intensive management, the land administrator must be infinitely more skillful in combining uses and at the same time minimizing conflicts.

Multiple Use Not a Universal Answer

One feature of land management needing emphasis in terms of multiple use is the fact that full utilization of resources isn't always the best management for a given tract of land. The case frequently prevails where one or two uses may be so completely dominant that all other uses

WATER

Managing forest land to produce the maximum yields of useable water can be achieved. Sometimes adjustments must be made to insure maintenance of satisfactory watershed conditions or improvements over and above previously accepted adequate standards.

must be subordinated or eliminated. As an example, watershed values of certain southern California mountains require that during high hazard fire weather all human use be eliminated. Or, in the established and designated wilderness areas in national forests and parks, some uses are completely eliminated in deference to the dominant wilderness values and use.

Conflicts are Frequent

In closing this brief description a few instances illustrating the complexities of multiple use will serve to bring out the realities in its application. One of the most complex aspects of multiple use application involves conflicts within uses rather than between uses. For example, mass recreation requires roads and improved travel facilities, whereas wilderness use is conceived and carried out without these facilities. The two are not harmonious yet both are essential and highly desired. In timber production the harvesting rotations necessary for pulpwood or other small products are distinctly different from those required for producing sawlogs, yet both are desirable in their own particular circumstances.

Conflicts between uses may arise, such as between grazing of domestic livestock and big game production, between management of the forest for recreation and timber production, and between watershed management and timber production. These are only examples which can be multiplied many times with each combination presenting its own particular problems and solutions.

GRAZING

Grazing by domestic livestock is a sound use of the forage in the forest under the multiple use concept. Conflicts can arise when grazing is permitted but as with any other use proper adjustments can eliminate difficulties.

Multiple Use Application Requires Skill

In applying multiple use the land manager is faced, therefore, with reconciling conflicts in such a way that overall objectives are attained. The manner in which objectives are reached is a measure of the manager's skill and success. Objectives are best fulfilled by securing the highest level of multiple use that the characteristics of the land will permit. There should be full recognition, however, that frequent exceptions to the general rule exist. Where these exceptions occur management systems must be designed and carried out with infinite skill to achieve most effectively the objectives of the particular ownership involved regardless of the level or degree of multiple use secured.

WILDERNESS AREA

Restriction of uses, such as in this wilderness area, is not incompatible to the multiple use principle where the area involved is within a broader area committed to full use. By full use it is planned to have all resources make their maximum contribution insofar as they are harmoniously combined in the multiple-use pattern.

A MATCH CAN BE A DEADLY MISSILE

Remember:

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